REMARKS

The Advisory Action dated September 20, 2002 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto. By this Amendment, claims 60-63 are added. No new matter is added.

Applicants have continued the examination procedure by filing a Request for Continued Examination. Original claims 20, 21 and 52 have been substantially reintroduced as new claims 60-62.

Claim 14 remains rejected under 35 U.S.C. 102(b) as being anticipated by each of Herron et al. '196, Herron et al. '492 or Reichert et al. This rejection is traversed.

Regarding Herron '196, Applicants do not understand the rejection based thereon. As Applicant understands the entire method described by Herron '196 (col. 16, Example 3, lines 34-45), the method comprises the following steps:

1. Providing a silicon solid phase
2. Silanization, i.e. covalent binding of glutaradehyde to the silicon solid phase (glutaraldehyde silicon surfaces)
3. Binding modified PEG molecules (e.g. PGE-ED_2) to the thus pretreated silicon solid phase by covalent coupling
4. In the last step, biding of a "capture molecule" (binding protein) such as antibody or an antibody fragment to the thus pretreated solid phase.

The coupling product resulting from said process, thus, always consists of silicon solid phase, glutaraldehyde, polyethylene glycol and binding partner.

This product is clearly different from the conjugate of PEG and an analyte specific reactant as described and used and claimed in the present application.

The PEG-ED_2 to which the Examiner refers, represents PEG with 2x ethylene diamine (=ED) and is by no means a PEG modified analyte, as required by the present claims.

Reichert uses biotinylated PEG (bi-PEG) to suppress unspecific binding to (strept-) avidin. This is also certainly not the PEG modified analyte specific binding partner used in the present application and required by the present claims either.

In addition to these purely chemical differences, however, there are also fundamental differences with regard to the function and effects of such conjugates. In the case of Herron '196 the entire surface of the silicon solid phase is covered with glutaraldehyde and then PGE. However, even for steric reasons, only part of the PEG molecules themselves can couple to antibodies or antibody fragments. Moreover, it is obvious that the antibodies bound to the solid phase in the case of Herron '196 can bind to the solid phase PEG only at one site or only a few sites. In the case of Herron '196, thus, interferences of unspecific binding to the solid phase are eliminated, however, unspecific binding to the "capture molecule" is not eliminated.

The method of the present invention is totally different therefrom. Derivatization of the analyte specific reactant with PEG leads to unspecific bindings to this reactant being suppressed. The solid phase itself is not PEG-derivatized or modified.

These very functional aspects are addressed in the schemes in the figures attached to Applicants' September 3, 2002, Amendment After Final Rejection.

Applicants respectfully submit that there exist clear differences between Herron et al. and the invention of the present claims, including both chemical and functional differences as explained above.

Also, as discussed in Applicants' September 3, 2002 Amendment After Final Rejection, in Herron '492 in the illustrated solid phase the specific detection of mouse antibodies and labeled anti-mouse antibodies has been performed. Thus, the presently claimed invention is also not anticipated by this reference.

For at least the above reasons, reconsideration and withdrawal of the rejection of claim 14 under 35 U.S.C. 102(b) are respectfully requested.

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300, referencing Docket No. 100564-08023.

Respectfully submitted,

Robert K. Carpenter
Registration No. 34,794

Customer No. 004372
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
1050 Connecticut Avenue, N.W.,
Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810
RKC/baw